



STATUS REPORT

Progress and Improvements

DPW BUREAU/OFFICE Back River Wastewater Treatment Plant (Back River)

Date 9/16/2022

Parameters	Week ending 9/2/22	Week ending 9/9/22	Permit limit	Meeting Requirement
Total Suspended Solids (TSS)	<5.0 mg/l	<5.0 mg/l	15 mg/l	Yes
Biochemical oxygen demand (BOD)	<2.0 mg/l	<2.0 mg/l	15 mg/l	Yes
Total phosphorus (TP)	0.14 mg/l	0.17 mg/l	0.30 mg/l	Yes
Ammonia (NH3)	0.7 mg/l	0.3 mg/l	3.0 mg/l	Yes
Total nitrogen (TN)	2.9 mg/l	2.7 mg/l	4.0 mg/l	Yes
E-coli	3 MPN*/100 ml	3 MPN*/100 ml	126 MPN*/100 ml	Yes

MPN = Most Probable Number

Personnel Updates

Baltimore City Department of Public Works (DPW) has hired two temporary personnel to supplement our maintenance team at the plant. This will increase our capacity for maintenance staff at the plant. DPW hopes to have both onboarded by the end of the month.

Additional maintenance training support is underway with National Technical Training (NTT), a subsidiary of ECPI University. The City has entered into an agreement with NTT Training to provide ongoing classes for electrical and maintenance craft technicians. This week NTT held classes on medium voltage electric. In October, they course schedule will focused on the Basics of Industrial Electricity and Troubleshooting Electric Motors. These trainings will be offered at both Back River and Patapsco Wastewater Treatment Plant.

Maintenance Updates

Our preventative maintenance plan is well underway. Since our last progress report, 176 preventative maintenance work orders have been processed. Of those, 80 work orders have been completed and closed by our maintenance staff.

Primary Settling Tank (PST) #5 cleaning has been completed. Repair assessment is underway by on-site contractor to order appropriate materials. PST #6 remains to be cleaned and assessed for repairs. The cleaning and assessment of #6 will be completed by the end of 2022. The plant will have a fourth PST, #7, in service as of late September and two others, #2 and #9, by January 2023. Plant operations require 4 small

^{*} Data based on preliminary numbers



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PSTs in service for full treatment. BRWWTP has 11 PSTs total (2 large and 9 small). By January 2023, Back River will have two large and 4 small PSTs available for service.

In-Ground Digester cleaning and repairs for #1 and #4 are underway. Replacement of the gas compressor mixers, valves, etc. is nearing completion with the solid's removal on pace for completion near the end of 2022. This will provide needed redundancy to assist during the capital project, SC 992, which will rehabilitate the remaining In-Ground digesters and the egg-shaped digesters.

Contractor assistance is being utilized for the algae and phragmite maintenance in the Activated Sludge areas. Additional support is being procured to assist with personnel focus shifting to preventive maintenance while outsourcing of large repairs to outside contractors.

Summary

DPW continues to maintain Back River's effluent within its stringent permit limits. By all measures, **At this time**, all parameters are reports and Back River has maintained compliance with our permit limits for 20 consecutive weeks four months.

DPW recognizes that Back River is a valuable asset to the Baltimore region and we are excited about the path forward to sustained compliance.